FINAL ANNUAL REPORT
1968 - 1969

Southwest Center for Advanced Studies
Southwest Center for Advanced Studies
Final Annual Report
1968-1969

The Southwest Center for Advanced Studies became The University of Texas at Dallas on September 1, 1969

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Release to Public Media
This report is released to public media upon distribution at the final Annual Meeting of the Center's Governors, Trustees, and Advisory Council, September 31, 1969
Our appreciation is keen indeed for those who took extreme care to be well informed about educational needs of the area and so articulated them as to gain the approval of House Bill 303 by the 61st Legislature and the Governor. Such a list is widely inclusive: The Lieutenant Governor, Speaker of the House, Representative; the bills’ sponsors, Senator Ralph Hall and Representative Jack Blanton; community leaders, and people of other categories. To be named especially for the time, energy, and outstanding spokespersons he gave the effort is Mr. Morris L. Hite. As we reflect on the Southwest Center for Advanced Studies and its past and on the University of Texas at Dallas and its future, we feel deeply re- vived and strongly encouraged. We are no less conscious of the awesome, continuing challenge to meet both the quantitative and qualitative goals of higher education for the area. We are no less convinced that broad, pervasive, sincere co-operation among all public and private institutions is the key to the complete attainment of the grandeur of educational achievement symbolized by Nevin’s mountain range analogy. Great tasks lie ahead. That these will be addressed with vigor, devotion, and unwavering commitment, we have no fear. That your continued support will be needed and given, we feel is equally certain. The support which we began will be carried forward by the Excellence in Education Foundation, with your efforts we invite you to join. We seek your support of The University of Texas at Dallas as we sought and gained your support of the Southwest Center for Advanced Studies.

Erik Jonsson
Chairman, Board of Governors

President’s Message
A Chalice of Fire

This is the final Annual report of the Southwest Center for Advanced Studies. All that made it a vital force in this region—its faculty staff, its research and teaching programs, laboratories, and some land and a campus—are now the resources of the beginning University of Texas at Dallas. What remains, some 600 acres of land surrounding the UTD campus, and some monies in hand and pledged, are the resources of an Excellence in Education Foundation.

Our primary objective will be to provide private funds, to add to the state and federal funds, and to translate this sector of support into the means and flexibility and incentive to build on the foundations and great progress into the development of a new university.

EFF will also use part of its resources to help other institutions, with particular emphasis on developing the co-operative graduate teaching programs between colleges and universities which the SCAS began and always held high among its objectives.

Turn back the clock about 10 years. Our story begins with those who not only saw the need for this region to develop its educational resources more rapidly, but also had the desire and resources to do something about it. Three families took it upon themselves and their commitments, one among many such efforts to make in the lifetime of philanthropy, particularly for better education. These three, Cecil and Ida Green, Eugene and Margaret McDermott, and Erik and Margaret Jonsson, made their gifts without special influence by them or their industrial associations on how and where this development could develop. They went on to find and convince a great man of science to take their gifts in an idea, and breathe life into a new and unique institution of higher education.

But where do you find such a man, both capable and willing to risk all in tackling what is only an idea? You look for a successful man, in a position of prestige; comfortably secure in his work and yet outspoken in his ideas for better science and educational progress. You throw him the challenge that here, forming this new institution, he better put his ideas to work.

Thus there were Dr. Lloyd V. Berkner, and in four years he built an institution of significant quality and importance, whose impact was felt by our region, by our government, and by associates in the whole world of scientific and educational endeavor. I have often called Lloyd a scientific entrepreneur. He had to chart new courses, with little precedent to guide him. He had first to convince groups of scientists to come join him, by showing them challenges and opportunities to work together in ways not possible in their own institutions.

The building of a new and unique institution, for which there is no precedent to guide you toward success, is much like the research and teaching work which leads to a new product or a new scientific discovery, or both. The developer must be constantly alert to alternatives, and willing to shift to a new emphasis. Lloyd could do this, and the work he did with pride of achievement, embrace another’s ideas. And so he built the SCAS in ways that you might say by doing; a process his detractors would say was proof of lack of planning. But in which I and many others would say was proof of his ability to shift emphasis without losing sight of the end goal.

It was, I believe, Doctor Berkner’s belief that institutions and all organizations pass through stages in which the needs for leadership emphasis change; this caused him to seek a successor. But he was honored by becoming the SCAS’ second president in 1965; it was his and Erik Jonsson’s view that if Lloyd would stay on as scientific director, someone else could better take hold to find ways best suited for the SCAS to develop its teaching programs, and its co-operative relationships with other institutions; in addition, to add ultimated and permanent institutional size and form. This was more of a movement which I might do despite my lack of academic and scientific training.

We worked well together in this relationship for the next two years; Erik, the Board of Governors, and the Board of Trustees, Lloyd and myself, until Lloyd’s death. By then we had a fairly clear idea of the limits we could expect to reach by relying solely on co-operative programs. We reached the conviction that a closer and more vital affiliation with a state institution (with a blending of state support, federal research and private funding) was the only way we could grow significantly and expect to overtake the more rapidly growing needs for graduate education that we saw all around us. Our Annual Reports, the past two years, have reflected this thinking. We could see that private institutions were finding it increasingly difficult to attract and particularly to develop new graduate programs. We could see that co-operative programs, although vital, could not in themselves supply more than a small part of our need. And we could see that state-supported education was the main thrust in our nation.

Erik Jonsson, a newly-created coordinating Board, Texas College and University System, conceived through Governor Connally’s efforts; to take the University of Texas Legislature to come up with a master plan for Texas. A study of the
Officers

Erik J. Johnson, Chairman of the Board of Governors
Dr. Francis S. Johnson, Acting President
(Appointment effective July 1, 1969)

Gifford K. Johnson, President (To July 1, 1969) and Chairman, Board of Trustees
Ralph N. Stohl, Vice President; President, Corporate Secretary and Treasurer
John S. Robottom, Assistant Corporate Secretary
Sel Goodell, Assistant Corporate Secretary

Administrative Staff

David W. Canham, Director of Research Support; Executive Officer, Mathematics and Mathematical Physics Division; Manager, Dallas Magnetic Observatory and Radiation Safety Officer
Jack S. Donaldson, Director, Computer Center
Stewart C. Fallis, Director, Fiscal Affairs
Richard T. Lippcom, Director of Development
Allan T. Mitchell, Director of Public Affairs
Geoffrey D. Ferguson, Jr., Director of Personnel
David Edmonson, Executive Officer, Geoscience Division
(Appointment effective July 7, 1969)

Ronald C. Peavey, Assistant to the President (To Tager, August 3, 1969, as Executive Director)
Charles E. Petak, Director of Physical Plant

V. Pfeifer, Director, Campus Facilities (Voluntary Retirement effective July 5, 1969)

Westley J. Elston, Controller

John S. Robottom, Assistant Corporate Secretary; Director of Administration and Legal Counsel

Miss Jeanne M. Thweatt, Executive Officer, Biological Division

John W. Vanderford, Executive Officer, Atmospheric and Space Sciences Division

The Year, 1968-1969

General Summary

The combined community task of this past year was obvious: to demonstrate the need for added state participation in North Central Texas' education, and to seek a significant proportion of such participation; to have this become an integral part of the Coordinating Board's master plan, as adopted by the Texas Legislature.

The Dallas Chamber of Commerce, led by President Morris Hite and Dr. Bill Heny, Jr., as Chairman of the Education Committee, took the leadership in surveying the needs.

The findings were both simple and powerful. In 10 North Central Texas counties, we had 35 per cent of the state's educational needs in terms of future enrollments, and only 12 per cent of the facilities. In the next 10 to 12 years, if we doubled the enrollment now, places now available through expansion of existing schools and addition of junior college systems of large size, we would still be short of our needs in 1980.

But, we would be most deficient in graduate opportunities. Where tens of Ph.D.'s in science and technology were now being produced, hundreds were being recruited into the area and hired to meet the requirements of our industries and institutions. As a region, we were and are major importers of technically trained talent, in a most competitive world.

This, remember, was not a new problem in 1969. It was the problem that the 1965 founders saw and had set out to solve in the first place, a decade ago. Except that, for all our progress in 10 years, our needs had grown faster than our educational output, and this was continuing. Like Alice in Wonderland, we were having to run as fast as we could to stay in the same place, or worse.

House Resolution 375 of the 60th Texas Legislature, in 1967, pointed out the need to accelerate graduate education in science and technology in North Central Texas, and called for use of both public and private educational resources to accomplish this.

The mutual interest of The University of Texas System, the SCAS, and the Dallas community leadership increased, toward finding a method of affiliating the SCAS with The University of Texas. We recorded, in our Annual Report of a year ago, the action of the UT System Regents (July 26, 1968) in voting acceptance of the gift of SCAS.

In the past year, there were many actions, reactions, and counter-proposals, along the way to approval. There is little point in reviewing these here, step by step, since they represent only the facets of the proper democratic process, through a decision was reached for state and regional benefit. Some of the key dates are recorded, briefly, in the chronology that follows this section, within the context of many events that stand as milestones in the total history of the privatization, the SCAS.

In a comment of some years ago, as SCAS's President, I attempted to point out the process in progress and results. Now, I think we can point to a most significant result - the establishment of UTD - within the past year, but stemming from several years of progress.

The Hon. Preston Smith's signature of House Bill 303 into law, June 13, 1969, was a climactic step in the legislative process to create UTD out of the gift of SCAS.

It would not have been possible, and would not have had the leadership and support of Dallas/Fort Worth and many other communities and individuals in North Texas, great debts of gratitude exist, and our final Annual Meeting, Sept. 13, 1969, is intended to add in part to acknowledge this further.

In the year-long legislative process leading to approval of House Bill 303 there was much concern among some educational institutions in the area that the SCAS joining with UTD support in their own future developments. Assurances and ineptitude of the need, to the contrary, we were and are major importers of technically trained talent, in a most competitive world. This, remember, was not a new problem in 1969. It was the problem that the 1965 founders saw and had set out to solve in the first place, a decade ago. Except that, for all our progress in 10 years, our needs had grown faster than our educational output, and this was continuing. Like Alice in Wonderland, we were having to run as fast as we could to stay in the same place, or worse.

North Central Texas is the winner of the basic issue, the bracing, first to The University of Texas emphasis and additional state participation to bear on the educational needs of the state's largest grouping of communities and industries.

Now that The University of Texas at Dallas has become reality, we want to recognize especially (among the debts of gratitude) the private support of the past several years: the direct contribution of more than $8 million to the SCAS's development. Many gave from their resources; not only money, but time and talent.

How was this at all possible? First, of course, by the vision and perseverance of the three founding families and Doctor Berkner; but, from that point on, more importantly, by the community.

Honors are due our Trustees and Advisory Council members, many of whom helped to extend private financial support to a national scope. It was they who agreed to make the SCAS gift to The University of Texas System and the people of North Central Texas.

It is a considerable gift; not just in terms of land, structure, and funding, which add up to over $20 million, but even more in terms of faculty strength and its added utilization in graduate training. We give this gift in tangible things like land and buildings, which can be counted, but hardly anywhere is there any way to add up the value of intellectual resources and a major body of scholarship, but these are even more. In addition, the Excellence in Education Foundation retains land and redevelopment now worth another $50 million, to develop and use to support higher education.

Obviously, special recognition is due the 61st Texas Legislature, with Governor Smith, The Hon. Ben Barnes, Lieutenant-Governor, and the Hon. Gus Muschler, Speaker of the House; Representative Jack Blanton and Senator Ralph Hall, the sponsors of House Bill 303, and the members who helped both chambers, particularly our Dallas delegation. All give careful consideration to the North Central Texas problems in reaching the decisions that make The University of Texas at Dallas a living institution today.

It is important to reiterate, here, that nothing but full co-operation with all regional aspects of graduate education, and with all regional institutions, is in the hearts and minds of those who will work forward from this date.

Dr. Francis S. Johnson, who has headed our largest SCAS' division (Atmospheric and Space Science), has been named Acting President as our past year drew near a close, to make the transition into The University of Texas at Dallas and continue in his office there. UTD will grow well under his direction.

Most important, I am not reporting an ending in these words, nor in the pages that follow. I am reporting a beginning, on the foundation that has been laid in years past. To the SCAS, we are building well, a fair house on what is now another's ground.

Gifford K. Johnson
President (To July 1, 1969)
Chairman, Board of Trustees
September 11, 1969

The Hon. Preston Smith, Governor of Texas, presents Bill 303 to the 61st Texas Legislature, June 13, 1969. The act enabled establishment of the University of Texas at Dallas, through the gift of the Southwest Center for Advanced Studies to the State of Texas. Witnessing the signing are Representatives Jack Blanton, Tom Neuro, Joe Ratliff and Bill Bracken- lein of the Dallas County delegation to the 61st Legislature.
The Year, 1968-1969
of research and Education Summary
SCAS's Research Links to Apollo 11 Landing
In July, 1969, men walked on the Moon. Just as predicted in a SCAS faculty conversation of several years ago, people spoke English; they were United States citizens for which our Geosciences Division seedling asks questions and discusses how to do such a study. On a subsequent Apollo flight, Astronauts will carry an instrument designed to the Atmosphere and Space Sciences Division. Faced on the lunar surface, it will measure the Moon's tenous atmosphere.
Unfortunately, the public has no similar opportunity to witness and be thrilled by many other experiments carried on by our faculty and staff, such as mapping the energetic fields of interplanetary space, without which knowledge a lunar landing might not have been attempted. Furthermore, international television has not witnessed the many unmanned scientific spacecraft, nor known the search for truth in a laboratory and the award of an advanced degree to an emerging young scientist.
To those involved, there is the satisfaction of a job well done. Some have contributed to knowledge in a closely-related research and education process. That is our story of the past year, of each year before, and particularly those who have come. Total Ph.D. Awards Increase To 11 During Year
The award of doctoral degrees by four institutions of our graduate students, during the year increased to total 11. These students focused in 11 of the 22 Studies at 11.
Dr. Celina (Aza) Hausmann, Mr. Michiko Mitani, Mr. Ling (Chu) Yu and Mr. Miguel Flores da Cunha composed dissertation requirements through research in the Biology Division. In addition, Dr. W. Green, Jr., received his degree from Texas Christian University, through research done at the Dallas Geometric Center under a visiting Scientist appointment. Three awards have been made by the University of Texas, including one by each for Oklahoma State, Southern Methodist, and Emory Universities, in cooperation with the SCAS. The other doctoral degrees have been granted by universities outside the United States.
Total SCAS faculty remained constant at 48 as the year ended.
Four Major Satellite Launches Highlight Space Program
The year was a most active one within our Atmospheric and Space Sciences Division, with four major launches of scientific experiments to interplanetary and cis-lunar space, plus probes from the arctic and the equator.
In November, 1968, Pioneer D (designated Pioneer 9 after launch) went from Cape Kennedy, carrying Geometric radiation detectors on especially what happens when a cloud of cosmic rays is hit by a low-energy particle. It has been from our long-term exposure this month, the first to be analyzed.
"It has been my view," says Professor Bales, "that the different times of rejection and acceptance of our new particles are the ones which differ by an order of magnitude imply that the Earth will hardly ever stand in what would truly be a state of equilibrium. On this view, the relative motion of blocks on the surface is dependent on the main on properties and the force of the block, which is undoubtedly one of the most difficult problems in the Earth's crustal problem.
Developed further during the past year, scanning electron microscope studies of Cretaceous radiolarian microfossils, a new point to a conclusion contrary to accepted views. Arac, a taxon so now, another family of the space microscope, has found that these sea-living micro-organisms evolved rapidly during the geological period; many species were stratigraphically short-ranging. This radiolaria can play an important index role of wide-world correlation of Cretaceous age data from such sources as the abyssal sediments of the oceans.
Other divisional studies including magnetic variation and conductivity studies in western montane areas, radioactive isotope studies involving the radioactive decay of natural mineral samples, and the associated field work this year have been completed. Radioactivity and its effects on calcification processes with organic material, continued through the year. In the field, our faculty joined in such expeditional work as the cruise of the deep-drilling ship Glomar Challenger in both the Gulf of Mexico, and in further seismic explorations of the Gulf's sediments on lines from Mexico to Florida.
Research in Transpiration Has Substantial Progress
Genetic information exists in the form of the DNA (deoxyribonucleic acid). DNA has a double function: to specify, as a library, the chemical detail of thousands of proteins (chiefly enzymes) required for the machinery and structure of a cell; it must also be the template for the exact copy of itself, so the new cell will have its own library.
Analysis of the mechanism responsible for the first step in transfer of genetic information through cell division is under way in the Biology Division during the past year, as did studies on physical details of the genetic material.
Assoc. Prof. Hans Bremer and Asst. Prof. Karl Mueller pursued the transcription questions. In the translocation process, the genetic code is written onto messenger RNA (mRNA) with the help of the enzyme-directed RNA polymerase.
"The discovery of the mRNA was a significant step in our understanding of the genetic code," said Prof. Bales. "It is now possible to explain the biological significance of the mRNA, the molecule which carries the genetic information from the DNA to the protein molecules of the cell.
Assoc. Prof. Ascott Bales and Asst. Prof. Karl Mueller have pioneered the transcription questions. In the translocation process, the genetic code is written onto messenger RNA (mRNA) with the help of the enzyme-directed RNA polymerase.
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February 14, 1961
Charter issued by State of Texas. Dr. Lloyd V. Berkner heads the then Graduate Research Center of the Southwest as President. Co-founders are Erik Jonsson, Cecil H. Green, and Eugene McDermott.
April 1, 1962
Divisions established: Atmospheric and Space Sciences, Prof. Francis S. Johnson, Head; Geosciences, Prof. Anton L. Hales, Head; and Mathematics and Mathematical Physics, Prof. Ivar Robinson, Head.
November 15, 1962
NASA Administrator James Webb announces a major three-year supporting grant for Center research at the annual membership meeting of the Dallas Citizens Council.
July 11, 1963
Dallas Geomagnetic Center buildings, constructed by Texas Instruments, dedicated to the Center. Coast and Geodetic Survey (now part of Environmental Science Services Administration) begins continued operation of Standard Magnetic Observatory.
September 1, 1963
Southern Methodist University and Geosciences Division begin joint Earth sciences graduate programs.
December 16-18, 1963
International Symposium on Geovisualization Collapse attracts 300 leaders in science from across the world; puts story of "quakes" into public media.
June 1, 1964
First Ph.D. awarded to student who completed dissertation work at Center, by The University of Texas at Austin (to Dr. Joseph Zund, in mathematics).
October 4, 1964
Biography Division established; Prof. Crites Brech, Head.

1963 (October 29) Co-founder Erik Jonsson and Dr. Lloyd V. Berkner dedicate the site of the Founders Building, placing a 100-year time capsule in its foundation.

1964 (October 29) The Hon. John Connally, Governor of Texas, formally opens the Founders Building. Activities transfer from prior sites at Southern Methodist University and the Crow-Hunt Building.
March 17, 1965
Mr. Gifford K. Johnson becomes President. Dr. Lloyd V. Berkner continues as Chairman, Board of Trustees.
August 8, 1965
TAGER (The Association for Graduate Education and Research of North Texas) organized by the Center, Southern Methodist, and Texas Christian University. Cecil H. Green is Chairman, Board of Trustees; Dr. Jesse Hobson named Executive Director.
October 31, 1965
Dallas Founding Fund, including pledges and gifts of 584 donors, exceeds $5 million goal.
December 5, 1965
The Western Company purchases site for first industrial research laboratory in Technology Park, on the campus.
December 16, 1965
Major rocket launch from Cape Kennedy carries Center experiment for first time (Pioneer 6, in Sun-centered interplanetary orbit).
January 16, 1966
Regional High Magnetic Field facility established; Prof. Lawson T. Marshall heads facility's faculty and related materials research program.
January 19, 1966
National Institutes of Health announces major seven-year supporting grant for Center research in molecular genetics.
January 25, 1966
Prof. Francis S. Johnson named "Science Scientist of the Year" by American Institute of Aeronautics and Astronautics.
March 16-20, 1966
Center's Fifth Anniversary program focuses on national leaders' discion of means for meeting graduate education needs in North Central Texas, including use of television systems.
August 17, 1966
The Hon. Ben Barnes, Speaker of the House, heads a Texas legislative team visiting the Center to review programs and plans for contributions to regional graduate education.
October 7, 1966
Dr. Lloyd V. Berkner receives NASA's Public Service Medal in ceremonies at Washington, D. C.
November 9, 1966
"Our next five years are planned to give emphasis to education, while continuing to build our research base at a modest rate," says President Gifford K. Johnson in summary comment at the Annual Meeting.
January 1, 1967
Corporate name is revised to Southwest Center for Advanced Studies, previously used to designate research and teaching divisions; "Graduate Research Center of the Southwest" officially dropped.
March 27, 1967
TAGER announces plans for opening of television network for graduate education by September.
April 19, 1967
Dr. Lloyd V. Berkner receives Bowie Medal, highest honor of the American Geophysical Union, at Washington, D. C.
May 1-3, 1967
National authorities in science, business and government attend meeting of American Astronautical Society in Dallas on "Commercial Uses of Space." Program is arranged by Dr. Lloyd V. Berkner and Mr. Ross C. Peavy.
May 24, 1967
Mr. Robert W. Olson, Vice President, Special Projects, Texas Instruments, is named TAGER president, "on loan" from his industry.
May 27, 1967
House Resolution 375 adopted in 60th Texas Legislature; points out need to accelerate graduate education in science and technology in North Central Texas; calls for using to the maximum "the advantages of existing competence and resources, both public and private."

1965 (March 17, August 8) Gifford K. Johnson was named the second President of the Center, with President Wilis M. Tate of Southern Methodist and Chancellor James Moody of Texas Christian, he signed the agreement for formation of the Association for Graduate Education and Research of North Texas (TAGER).

1967 (September 5) TAGER began teaching by closed-circuit television.

June 4, 1967
Dr. Lloyd V. Berkner dies in Washington; stricken at a meeting of the National Academy of Sciences, which he was serving as treasurer.
July 13, 1967
Fields of 100,000 gauss generated for first time at the High Magnetic Field Facility.
August 7-25, 1967
Geosciences Division conducts six Short Course for College Teachers; 30 attend, representing schools from Maine to California, Florida to Washington.
September 5, 1967
Prof. Wolfgang Rindler, Mathematics and Mathematical Physics Division, is first SCAS teacher to conduct class as TAGER begins television course transmissions, chiefly at graduate level.
October 25, 1967
Development of new opportunities to speed the buildup of graduate education in North Central Texas is expected to involve state-supported programs and the SCAS' faculty and research, says President Gifford K. Johnson at the Annual Meeting. Mr. Johnson is elected Chairman of the Board of Trustees.
March 22-23, 1968
First SCAS Chemistry Colloquium held; Dr. Charles G. Overberger, Chairman of Chemistry, University of Michigan, and past president of the American Chemical Society, speaks of great need for training in chemistry of large molecules, both natural and synthetic.
May 27, 1968
Southern Methodist Institute of Technology and Atmospheric and Space Sciences Division announce joint space sciences' graduate programs, with award of degrees "in co-operation."
June 21, 1968
Chancellor Harry Ransom, The University of Texas System, makes official announcement to the Coordinating Board, Texas College and University System, that proposals concerning the SCAS are forthcoming.
July 1, 1968
Prof. Royston C. Clowers named Head, Biology Division.
July 26, 1968
UT System Regents, meeting at Midland, direct Chancellor Ransom to present proposals to the Coordinating Board.
August 11-16, 1968
Prof. Francis S. Johnson serves as vice-chairman of planning study on future space research, conducted for National Academy of Sciences' Space Science Board.
November 11, 1968
Coordinating Board holds public hearings on UT System proposals; alternate plans offered by Board staff and heads of North Texas State University, Texas Woman's University, and East Texas State University.
December 3, 1968
Coordinating Board recommends federation of public universities in North Central Texas; a new upper-level college for Dallas, with its own board of regents, to open in 1973; and transfer of the SCAS to The University of Texas System as a research institute "of highest order," but not as a "primary degree-granting unit."

December 16-20, 1968
Fourth Texas Symposium on Relativistic Astrophysics brings 485 scientists to Dallas for debate on "pulsars" and gravitational waves. SCAS, The University of Texas at Austin and American Astronomical Society are co-sponsors.
December 26-31, 1968
More than 4,000 attend Annual Meeting of American Association for Advancement of Science in Dallas; Mayor Erik Jonsson is general chairman. Prof. Francis S. Johnson and Anton L. Hales are among leading speakers in 21 major sessions, 760 sub-sections.
January 14, 1969
Rep. Jack Blanton of Dallas County introduces House Bill 303 in 61st Legislature; bill provides for establishment of The University of Texas at Dallas, but restricts UT System Regents from permitting undergraduate enrollments or award of bachelor's degrees until September 1, 1975.

April 2, 1969
HB 303 passes in House, by voice vote on third reading; 119-19 in two earlier ballots.
HB 303 passes in Senate, by voice vote, after 27-hour debate. Senate adds amendment by sponsor Ralph Hall of Rockwall, spelling out intent of Legislature to avoid damage to programs of other universities in North Central Texas, and House concurs.
May 30, 1969
House and Senate re-pass HB 303, revised at request of The Hon. Preston Smith, Governor, to limit UT-D undergraduate work to junior and senior years, beginning on September 1, 1975. Graduate work may begin immediately. June 6, 1969
Three-million dollar development program (of 1968) exceeds goal.
June 13, 1969
Governor Smith signs HB 303 at the SCAS' Founders Building, in a public ceremony.
July 3, 1969
Prof. Francis S. Johnson named Acting President, The University of Texas at Dallas, and Acting President, Southwest Center for Advanced Studies, the latter effective immediately. Gifford Johnson remains Chairman, SCAS Board of Trustees.
August 1, 1969
Ross C. Pevey named Executive Director of TAGER.
September 1, 1969
Southwest Center for Advanced Studies becomes The University of Texas at Dallas. Excellence in Education Foundation succeeds SCAS as non-profit organization to aid graduate education; to develop further 550 acres of land, adjacent to UD-D campus, and to assist otherwise in higher education development.
September 11, 1969
Final Annual Meeting held by Southwest Center for Advanced Studies' Board of Trustees and Advisory Council.

1969 (June 13) The Hon. Preston Smith, Governor of Texas, spoke at ceremonies centered on his signing of House Bill 303, establishing The University of Texas at Dallas.

1969 (July 2) Prof. Francis S. Johnson (center) became Acting President of the SCAS and The University of Texas at Dallas; Deputy Chancellor Charles M. Le Maitre (at left) and Chancellor Harry Ransom made the UTD announcement at the Founders Building.

Faculty and Scientific Staff
July 1, 1969 to June 30, 1969

Geosciences Division

Professor and Head
Anton L. Hales, Ph.D.

Professors
John W. Graham, Ph.D. (Retired)
Mark Landman, Ph.D.
Susan Johnson, Ph.D.

Associate Professor
Eugene T. Hevis, Ph.D.

Assistant Professors
Charles L. Heilley, Ph.D.

Postdoctoral Research Associates
Emmanuel S. Pascario, Ph.D.

Visiting Research Associate
Clark P. Reid, Ph.D.

Postdoctoral Research Associates
James E. Silber, Ph.D.

Research Scientists
Terry L. Blau, M.S.

Research Scientists
Sally E. Dolan, M.S.

Research Scientists
Richard J. Berman, M.S.

Research Scientists
Eugene L. Blau, M.S.

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Financial Summary 1968-1969

Research

As illustrated in the following table, budget reductions in federal funds available during the past year resulted in decreased research activity.

<table>
<thead>
<tr>
<th>Month</th>
<th>Sponsored Research</th>
</tr>
</thead>
<tbody>
<tr>
<td>April, 1962</td>
<td>$28,059</td>
</tr>
<tr>
<td>July, 1962-June, 1963</td>
<td>615,835</td>
</tr>
<tr>
<td>July, 1963-June, 1964</td>
<td>1,893,286</td>
</tr>
<tr>
<td>July, 1964-June, 1965</td>
<td>2,662,718</td>
</tr>
<tr>
<td>July, 1965-June, 1966</td>
<td>3,531,146</td>
</tr>
<tr>
<td>July, 1966-June, 1967</td>
<td>5,267,855</td>
</tr>
<tr>
<td>July, 1967-June, 1968</td>
<td>5,335,723</td>
</tr>
<tr>
<td>July, 1968-June, 1969</td>
<td>4,304,803</td>
</tr>
</tbody>
</table>

*Including overhead at same rate as recovered in sponsored research.
**Excludes summer students.

Operations Summary

The Center's operating expenditures and income used in operations during the year ending June 30, 1969, are compared with the year ending June 30, 1968.

<table>
<thead>
<tr>
<th>Item</th>
<th>1968</th>
<th>1969</th>
</tr>
</thead>
<tbody>
<tr>
<td>Operating Expenditures</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Research and educational activities</td>
<td>$3,679,226</td>
<td>$4,621,466</td>
</tr>
<tr>
<td>Administration, interest expense, etc*</td>
<td>1,774,221</td>
<td>1,926,965</td>
</tr>
<tr>
<td>Total Operating Expenditures</td>
<td>$5,453,447</td>
<td>$6,548,431</td>
</tr>
<tr>
<td>Income Used</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sponsored research grants and contracts</td>
<td>$4,304,803</td>
<td>$5,335,723</td>
</tr>
<tr>
<td>Private gifts</td>
<td>616,669</td>
<td>924,649</td>
</tr>
<tr>
<td>Rent and miscellaneous income</td>
<td>283,067</td>
<td>197,071</td>
</tr>
<tr>
<td>Proceeds from sale of securities and from &quot;Gifts in Kind&quot;*</td>
<td>188,808</td>
<td>90,069</td>
</tr>
<tr>
<td>Total Income Used in Operations</td>
<td>$5,393,447</td>
<td>$6,548,431</td>
</tr>
</tbody>
</table>

**Additional securities were sold to make payments of $1,086,550 on loan principals.

Facilities

During the year, the Center invested $148,507 in plant and equipment. The total investment in facilities at June 30, 1969, was:

<table>
<thead>
<tr>
<th>Property, Plant and Equipment at Cost</th>
<th>1969</th>
</tr>
</thead>
<tbody>
<tr>
<td>Founders Building*</td>
<td>$2,833,255</td>
</tr>
<tr>
<td>North Office Building</td>
<td>86,014</td>
</tr>
<tr>
<td>Site Improvements</td>
<td>571,916</td>
</tr>
<tr>
<td>Dallas Magnetic Observatory</td>
<td>49,015</td>
</tr>
<tr>
<td>Materials Research Laboratory</td>
<td>286,062</td>
</tr>
<tr>
<td>Equipment*</td>
<td>1,990,191</td>
</tr>
<tr>
<td>Land, Excluding Taxes and Interest</td>
<td>3,735,611</td>
</tr>
<tr>
<td>Construction in Progress</td>
<td>7,469</td>
</tr>
<tr>
<td></td>
<td>$9,561,619</td>
</tr>
</tbody>
</table>

*Alterations and fixed laboratory furnishings totaling $408,485 are included in equipment.
Annual Report, 1968-1969
Southwest Center for Advanced Studies
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Patricia M. Atmar, Assistant

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President Willis M. Tate and Chancellor James
Mouy, 1965 (page 9), Texas Christian University
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signing of HB303 (1969), Robert Hume; Prof.
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Anson L. Hales (page 11), S. Hershorn/Black
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